

IN THE CLAIMS

1. (Currently Amended) A method of producing biogas by anaerobic digestion of organic matter, ~~characterised by~~
comprising:

drying organic matter to a dry solids content of at least 50% by weight TS and subsequently pelletising the same,

mixing the pelletised organic matter with a liquid to form a slurry, contacting the slurry with biogas-producing bacteria for digestion under anaerobic conditions in a reactor ~~(2; 102; 202; 302)~~, and

digesting the slurry while producing biogas.

2. (Original) A method as claimed in claim 1, in which the organic matter is dried to a dry solids content of at least 70% by weight TS.

3. (Currently Amended) A method as claimed in ~~claim 1 or 2~~ claim 1, in which the dried and pelletised matter is ground before being mixed with said liquid to form the slurry.

4. (Currently Amended) A method as claimed in ~~any one of the preceding claims~~ claim 1, in which the organic matter is ground in such a manner that at least 80% by weight of the matter obtains a particle size of 0.5-3 mm.

5. (Currently Amended) A method as claimed in ~~any one of the preceding claims~~ claim 1, in which organic matter of a type other than the first-mentioned organic matter is also digested in the reactor ~~(202; 302)~~, at least 10% by weight of the total dry solids introduced into the reactor originating from the dried and pelletised organic matter.

6. (Currently Amended) A method as claimed in ~~any one of the preceding claims~~ claim 1, in which the liquid with which the organic matter is mixed is essentially pure water.

7. (Currently Amended) A method as claimed in ~~any one of claims 1-5~~ claim 1, in which the liquid with which the organic matter is mixed at least partly is digested sludge which is removed from the reactor ~~(2; 102; 202; 302)~~

8. (Currently Amended) A method as claimed in ~~any one of the preceding claims~~ claim 1, in which the pelletised organic matter is mixed in a premixing tank ~~(18; 118; 218; 318)~~ with a liquid to form said slurry with a dry solids content of 15-45% by weight TS, and this slurry is then introduced into the reactor to be digested at a dry solids content of 5-10% by weight TS.

9. (Currently Amended) A method as claimed in ~~any one of the preceding claims~~ claim 1, in which the dried and pelletised organic matter is dried green matter, such as dried agricultural products.

10. (Currently Amended) A method as claimed in ~~any one of the preceding claims~~ claim 1, in which the organic matter is ground before being pelletised.

11. (Currently Amended) A device for producing biogas by anaerobic digestion of organic matter, said device ~~(1; 100; 200; 300)~~ comprising a sealable, essentially gas-tight reactor ~~(2; 102; 202; 302)~~ having an inlet ~~(4; 104; 204; 304)~~ for organic matter and outlets ~~(6; 8; 106; 108; 206; 208; 306; 308)~~ for produced biogas and formed digested sludge, ~~characterised in that~~ wherein the device ~~(1; 100; 200; 300)~~ comprises a premixing tank ~~(18; 118; 218; 318)~~ for mixing organic matter dried to a dry solids content of at least 50% by weight TS and pelletised, with a liquid to a slurry, and a feed pipe ~~(4; 26; 104; 126; 204; 304)~~ for feeding the slurry to the reactor ~~(2; 102; 202; 302)~~

12. (Currently Amended) A device as claimed in claim 11, in which a mill ~~(14; 114; 214; 314)~~ is arranged for grinding the dried and pelletised organic matter before being introduced into the premixing tank ~~(18; 118; 218; 318)~~

13. (Currently Amended) A device as claimed in claim 12, in which the mill ~~(14; 114;~~

~~214; 314~~) is adapted to grind the dried and pelletised organic matter so that at least 80% by weight of the organic matter obtains a particle size of 0.5 - 3 mm.

14. (Currently Amended) A device as claimed in ~~any one of claims 11-13~~ claim 11, in which a supply pipe (~~122; 222~~) is arranged for feeding digested sludge from the reactor (~~102; 202~~) to the premixing tank (~~118; 218~~).